



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

09/989,910

11/20/2001

Richard B. LeVine

ECD-0003

1783

7590

05/11/2006

MILLS & ONELLO LLP

Suite 605

Eleven Beacon Street

Boston, MA 02108

EXAMINER

CHAI, LONGBIT

ART UNIT

PAPER NUMBER

2131

DATE MAILED: 05/11/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/989,910

Applicant(s)

LEVINE ET AL.

Examiner

Longbit Chai

Art Unit

2131

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 17 April 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20, 24-27, 35-42 and 45 is/are pending in the application.
- 4a) Of the above claim(s) 21-23, 28-34, 43, 46 and 47 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20, 24-27, 35-42 and 45 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 November 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. Original application contained claims 1 – 45. Claim 44 has been canceled; claim 24 has been amended in an amendment filed on 4/17/2006. The amendment filed have been entered and made of record. Claims 21 – 23, 28 – 34, 43, 46 and 47 have been withdrawn due to the restriction requirement. Therefore, presently pending claims for this instant application are 1 – 9, 11 – 20, 24 – 27, 35 – 42 and 45.

#### ***Continued Examination Under 37 CFR 1.114***

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 4/17/2006 has been entered.

#### ***Response to Argument***

3. Applicant's arguments with respect to the subject matter of the instant claims have been fully considered but are not persuasive.

4. As per claim1, Applicant asserts: "Downs reference fails to disclose the modified archive is transferred from the first system to the second system and instead, the digital content is modified at the recipient system following transfer of the digital content".

Art Unit: 2131

Examiner respectfully disagrees because Downs reference teaches (a) Transaction Data is a structure of information provided by the transaction processing function of the Electronic Digital Content Store(s) which is later used to correlate the Clearinghouse(s) processing with the financial settlement transaction performed by the Electronic Digital Content Store(s) and to provide user identity information to be included in the watermark of the Content downloaded to the End-User Device(s) (Downs: Column 76 Line 1 – 8), (b) when the Clearinghouse(s) receives a request for a decryption key for the Content from an intermediate or End-User(s), the Clearinghouse(s) validates the integrity and authenticity of the information in the request (Downs: Column 10 Line 50 – 57), and (c) the Clearinghouse(s) is still notified by the End-User Device(s) after each electronic item is downloaded (Downs: Column 47 Line 52 – 54). Therefore, Downs reference does teach the archive is modified (with embedded user-identity watermark) and then transferred (i.e. downloaded) from the first system to the second system.

5. As per amended claim 24, please see the rationale set forth in this Office action as follows.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraph of 35 U.S.C. 102 that forms the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1 – 9, 11, 14, 18, 19, 35, 37 – 40 and 42 are rejected under 35 U.S.C. 102(e) as being anticipated by Downs et al. (U.S. Patent 6,226,618).

As per claim 1, Mooney teaches a method for preventing unauthorized use of digital content data to be transferred from a first system to a second system comprising:

locating an archive of a digital content data at the first system (Downs: Column 51 Line 29 – 37);

determining transaction data of the second system that identifies the second system (Downs: Column 76 Line 51 – 58 and Column 76 Line 12 – 13; the second system is considered as the End-User Device(s));

determining whether the transaction data of the second system indicates whether the second system is a valid recipient of the archive (Downs: Column 76 Line 31 – 50 and Column 10 Line 50 – 57);

modifying the archive using the transaction data of the second system that identifies the second system to generate a modified archive (Downs: Column 76 Line 6 – 8, Column 76 Line 51 – 58 and Column 9 Line 16 – 18); and

transferring the archive from the first system to the second system if the second system is a valid recipient (Downs: Column 76 Line 1 – 8 and Column 47 Line 52 – 54).

As per claim 2, Downs teaches if the second system is not a valid recipient, transferring the archive from the first system to the second system, the operation of the archive failing in the second system (Downs: Column 3 Line 52 – 55).

As per claim 3, Downs teaches the first system comprises a hard media and wherein the second system comprises a computer system (Downs: Column 51 Line 32 – 37).

As per claim 4, Downs teaches the first system comprises a first computer system and wherein the second system comprises a second computer system (Downs: Column 3 Line 52 – 55).

As per claim 5, Downs teaches the first and second computer systems are remotely located. (Downs: Column 70 Line 18 – 20).

As per claim 6, Downs teaches determining transaction data of the second system comprises determining a data element selected from the group of data elements consisting of: transaction identification; system configuration information; manufacturer, serial number, and physical properties (Downs: Column 76 Line 12 – 67).

As per claim 7, Downs teaches determining transaction data of the second system comprises downloading an analysis tool to the second system, and running the analysis tool to examine the second system and to generate a unique identifying value that identifies the second system as the transaction data (Downs: Column 76 Line 6 – 8, Column 11 Line 40 – 54 and Column 9 Line 36 – 38).

As per claim 8, Downs teaches the unique identifying value is deposited in the archive that is transferred to the second system (Downs: Column 76 Line 6 – 8).

As per claim 9, Downs teaches the unique identifying value is encrypted and interleaved with the digital content data in the transferred archive (Downs: Column 27 Line 37 – 48).

As per claim 11, Downs teaches increasing a memory allocation of the archive before modifying the archive with the transaction data (Downs: Column 76 Line 6 – 8).

As per claim 14 and 18, Downs teaches before transferring the archive, removing a plurality of original data segments from memory locations of the archive and storing false data at the memory locations (Downs: Column 76 Line 6 – 8: the watermark is interpreted as false data and when executed as machine instructions would cause the system improperly functioned).

As per claim 19, Downs teaches the second system, following transfer of the archive, replaces the false data with the original data segments if the second system is a valid recipient (Downs: Column 11 Line 44 – 45: only the valid recipient can process the watermark properly to restore the original data segments).

As per claim 35, Downs teaches a watermark is deposited in the archive that is transferred to the second system (Downs: Column 76 Line 6 – 8).

As per claim 37, Downs teaches the false data comprises a machine instruction which is not properly functional when processed (Downs: Column 76 Line 6 – 8: the watermark is interpreted as false data and when executed as machine instructions would cause the system improperly functioned).

As per claim 38, Downs teaches aborting transfer of the archive from the first system to the second system if the second system is an invalid recipient of the archive (Downs: Column 76 Line 31 – 38).



As per claim 39, Downs teaches the transfer of the archive is aborted immediately if the second system is an invalid recipient of the archive (Downs: Column 76 Line 31 – 38).

As per claim 40, Downs teaches the transfer of the archive is aborted in an indirect manner if the second system is an invalid recipient of the archive (Downs: Column 76 Line 42).

As per claim 42, Downs teaches the second system receiving the transferred archive and de-interleaving or decrypting the archive using the transaction data of the second system so that the digital content data can be executed by the second system (Downs: Column 27 Line 37 – 48 and Column 11 Line 50 – 52).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

A person shall be entitled to a patent unless –

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 26 and 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mooney et al. (U.S. Patent 6,351,813), in view of Bean et al. (U.S. Patent 6,460,023).

As per claim 24, Mooney teaches a method for preventing unauthorized use of digital content data hosted on a system comprising:

determining whether an unauthorized use of the digital content data is in progress (Mooney: see for example, Column 5 Line 31 – 40 and Column 1 Line 59 – Column 2 Line 12: the attempt to retrieve the key for encryption / decryption the digital data need to be authenticated, as taught by Mooney, to prevent unauthorized access); and

in the case where an unauthorized use is determined, initiating a defense action by disabling only an input device in associated with the unauthorized use (Mooney: see for example, Column 5 Line 48 – 50).

Mooney does not disclose expressly the input device is only disabled in an authorized interface window when the target focus for the input device is an unauthorized application associated with the unauthorized interface window.

Bean teaches the input device is only disabled in an authorized interface window when the target focus for the input device is an unauthorized application associated with the unauthorized interface window (Mooney: Column 5 Line 48 – 54; Bean: Column 5 Line 66 – Column 6 Line 1 and Column 2 Line 20 – 21).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Bean within the system of Mooney because (a) Mooney teaches the security compartments are locked out to prevent the access from an unauthorized user to the system according to a specific security level complied with the given site's own security policy (Mooney: Column 5 Line 48 – 54) and (b) Bean teaches an enhanced and scalable authorization security system that each of the interface window can be counted as only a single authorized use of the content (Bean: Column 2 Line 20 – 21 and Column 5 Line 66 – Column 6 Line 1).

As per claim 25, Mooney as modified teaches disabling an input device comprises disabling a combination of keystrokes at a keyboard input device (Mooney: Column 5 Line 48 – 50: the input device is indeed associated with the unauthorized use).

As per claim 26 and 45, Mooney as modified teaches disabling the input device with regard to user interface windows related to the unauthorized use (Mooney: see for example, Column 5 Line 48 – 50 & Bean: Column 5 Line 66 – Column 6 Line 1 and Column 2 Line 20 – 21).

As per claim 27, Mooney as modified teaches the input device comprises a keyboard or a mouse (Mooney: Column 5 Line 48 – 50: the input device is indeed associated with the unauthorized use).

Art Unit: 2131

8. Claims 12, 13 and 15 – 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Downs et al. (U.S. Patent 6,226,618), in view of Horiike (U.S. Patent 6,744,905).

As per claim 12 and 16, Downs does not disclose expressly creating a map of the increased memory allocation.

Horiike teaches creating a map of the increased memory allocation (Horiike: Column 5 Line 55 – Column 6 Line 8).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Horiike within the system of Downs because (a) Downs teaches a secure content delivery system by using watermark techniques (Downs: Column 51 Line 29 – 39) and (b) Horiike teaches a novel solution of an image processing apparatus using the watermarking techniques (Horiike: Column 2 Line 35 – 36 and Column 5 Line 55 – Column 6 Line 8).

As per claim 13, 15 and 17, Horiike teaches storing the map in the archive, or in memory locations of the second system, or in the first system (Horiike: Column 5 Line 55 – Column 6 Line 8).

9. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Downs et al. (U.S. Patent 6,226,618), in view of Cialelli et al. (U.S. Patent 6,236,727).

As per claim 20, Downs does not disclose expressly the second system replaces the false data by the original data segments immediately prior to execution of the corresponding memory locations, and replaces the original data by the false data immediately following execution of the corresponding memory locations.

Cialelli teaches the second system replaces the false data by the original data segments immediately prior to execution of the corresponding memory locations, and replaces the original data by the false data immediately following execution of the corresponding memory locations (Cialelli: Column 2 Line 44 – 66: These are the scrambled, decrypted and re-scrambled techniques as taught by Cialelli).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Cialelli within the system of Downs because(a) Downs teaches a secure content delivery system by using encryption techniques (Downs: Abstract) and (b) Cialelli teaches enhancing the security for digital content data by using extensive encryption in order to protect the data against unauthorized access (Cialelli: see for example, Column 1 Line 47 – 51).

10. Claim 36 is rejected under 35 U.S.C. 103(a) as being unpatentable over Downs et al. (U.S. Patent 6,226,618), in view of Mooney et. al (U.S. Patent 6,351,813).

As per claim 36, Downs does not disclose expressly the unique identifying value is used to create a system unique encryption key.

Mooney teaches the unique identifying value is used to create a system unique encryption key (Mooney: Column 5 Line 27 – 35).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Mooney within the system of Downs because(a) Downs teaches a secure content delivery system by using encryption techniques (Downs: Abstract) and (b) Mooney teaches enhancing security system for protecting and controlling access to data content using a system of security keys (Mooney: Column 1 Line 10 – 14).

11. Claim 41 is rejected under 35 U.S.C. 103(a) as being unpatentable over Downs et al. (U.S. Patent 6,226,618), in view of Paulson et. al (U.S. Patent 5,585,585).

As per claim 41, Downs does not teach if it is determined that the second system is an invalid recipient of the archive, further modifying the archive to insert executable data into the archive that causes an exit, an error condition, or communication to another system entity which begins a cascading exit process, in the second system, and transferring the further modified archive to the second system.

Paulson teaches if it is determined that the second system is an invalid recipient of the archive, further modifying the archive (Paulson: Column 5 Line 57 – 62) to insert executable data (Paulson: Column 6 Line 12) into the archive that causes an exit (Paulson: Column 6 Line 12 – 18), an error condition, or communication to another

Art Unit: 2131

system entity which begins a cascading exit process, in the second system, and transferring the further modified archive to the second system.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Paulson within the system of Downs because (a) Downs teaches a secure content delivery system by using encryption techniques (Downs: Abstract) and (b) Paulson teaches providing an enhanced data protection algorithm to protect repertoire data content from unauthorized access (Paulson: Column 5 Line 57 – 59).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Longbit Chai whose telephone number is 571-272-3788. The examiner can normally be reached on Monday-Friday 8:00am-4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz R. Sheikh can be reached on 571-272-3795. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.


Art Unit: 2131

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Longbit Chai  
Examiner  
Art Unit 2131

LBC 

CHRISTOPHER REVAK  
PRIMARY EXAMINER

 5/9/06